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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/888,224	06/22/2001	Jay M. Short	DIVER1150-6	8097
28213 7:	590 08/23/2002			٠
GARY CARY WARE & FRIENDENRICH LLP 4365 EXECUTIVE DRIVE SUITE 1600			EXAMINER	
			WHISENANT, ETHAN C	
SAN DIEGO, (	SAN DIEGO, CA 92121-2189		ART UNIT	PAPER NUMBER
			1634	l===
			DATE MAILED: 08/23/2002	<b>v</b> )

Please find below and/or attached an Office communication concerning this application or proceeding.

3		Application No.	Applicant(s)		
Office Action Comments		09/888,224	SHORT ET AL.		
2	Office Action Summary	Examiner	Art Unit		
		Ethan Whisenant, Ph.D.	1634		
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).					
Status 1)□	Responsive to communication(s) filed on				
2a)□		— · is action is non-final.			
3)□	Since this application is in condition for allowa		osecution as to the merits is		
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. <b>Disposition of Claims</b>					
4)⊠ Claim(s) <u>1-92</u> is/are pending in the application.					
4a) Of the above claim(s) is/are withdrawn from consideration.					
5)[	Claim(s) is/are allowed.				
6) Claim(s) is/are rejected.					
7)	Claim(s) is/are objected to.				
8)⊠	Claim(s) 1-92 are subject to restriction and/or e	election requirement.			
Applicati	on Papers				
9)☐ The specification is objected to by the Examiner.					
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.					
If approved, corrected drawings are required in reply to this Office action.					
12) The oath or declaration is objected to by the Examiner.					
Priority under 35 U.S.C. §§ 119 and 120					
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).					
a)[	☐ All b)☐ Some * c)☐ None of:				
	Certified copies of the priority documents				
2. Certified copies of the priority documents have been received in Application No					
<ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>					
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).					
a) ☐ The translation of the foreign language provisional application has been received.  15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.					
Attachment(s)					
1) Notice	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal F	r (PTO-413) Paper No(s) Patent Application (PTO-152)		

U.S. Patent and Trademark Office PTO-326 (Rev. 04-01)

## ELECTION/RESTRICTION

## **ELECTION/RESTRICTION**

**1.** Restriction to one of the following inventions is required under 35 U.S.C. 121:

**Group I: Claim(s) 1-23 and 67-85** drawn to an isolated nucleic acid molecule or fragment thereof useful as probes in hybridization, classified in Class 536, subclasses 23.1 and/or 24.3.

Group II: Claim(s) 24-35, 36-39, 64 and 86-87 drawn to a purified polypeptide or variants thereof and an antibody which specifically binds to said purified polypeptide, classified in Class 530, subclass 350.

**Group III: Claim(s) 40-41** drawn to a method of producing a purified polypeptide which involves a host cell, classified in Class 435, subclass 69.1.

**Group IV: Claim(s) 42-55 and 88-92** drawn to a method of mutagenesis, classified in Class 435, subclass 440.

Group V: Claim(s) 56-60 drawn to a computer readable medium having stored thereon a nucleic acid sequence or a polypeptide sequence, classified in Class 702, subclass 20.

**Group VI: Claim(s) 61-63** drawn to a method of comparing nucleic acid or polypeptide sequences and identifying differences therein as compared to reference nucleic acid or polypeptide sequences, classified in Class 435, subclass 6.

**Group VII: Claim(s) 65** drawn to a method of catalyzing the hydrolysis cellulose, classified in Class 535, subclass 277.

**Group VIII: Claim(s) 66** drawn to an assay for identifying functional polypeptide fragments or variant thereof, classified in Class 435, subclass 4.

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## **2.** The inventions are distinct, each from the other for the following reasons.

Inventions I and II are patentably distinct in structure and physicochemical properties. Invention I is drawn to nucleic acids while invention II is drawn to proteins. Because nucleic acids are composed of nucleotides while proteins are composed of amino acids, the inventions have different structural and physical properties. Furthermore, the products of inventions I and II are utilized in different methodologies. The products in group I are used in a hybridization assay whereas the proteins of group II are used immunoassays or as antigens.

Inventions I and III are related as a product (i.e. nucleic acid) and a process of making a related product (i.e. the protein encoded by said nucleic acid). The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process. In the instant case the product (i.e the expressed protein) can be made by another and materially different process (e.g. a protein synthesizer). In addition the product (i.e. nucleic acid) as claimed can used in a materially different process of using said product e.g. the nucleic acids can be used as molecular weight markers in gel electrophoresis.

Inventions I and IV are related as a product (i.e. nucleic acid) and a process of making a related product (i.e. variant nucleic acid). The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can used in a materially different process of using said product e.g. the nucleic acids can be used as molecular weight markers in gel electrophoresis. In addition, the product (i.e. nucleic acid) as claimed can be made by another and materially different process e.g. the nucleic acids can be made by a DNA synthesizer.

**Inventions** I and V are unrelated products which comprise different structural characteristics.

**Inventions I and VI** are drawn to patentably distinct product and method. The product as claimed can be used in another and materially different process e.g. the nucleic acids can be used as molecular weight markers in gel electrophoresis.

**Inventions I and VII** are drawn to patentably distinct product and method. The product as claimed can be used in another and materially different process e.g. the nucleic acids can be used as molecular weight markers in gel electrophoresis.

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Inventions I and VIII are drawn to patentably distinct product and method. The product as claimed can be used in another and materially different process e.g. the nucleic acids can be used as molecular weight markers in gel electrophoresis.

Inventions II and III are related as a product (i.e. an expressed protein) and a process of making said product. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process. In the instant case the product (i.e. the expressed protein) can be made by another and materially different process e.g. a protein synthesizer. In addition the product (i.e the expressed protein) as claimed can used in a materially different process of using said product e.g. the (i.e the expressed protein) can be used as a antigen to elicit an immune response.

Inventions II and IV are related as a product (i.e. an expressed protein) and a process of making a related product (i.e. variant of said expressed protein ). The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can used in a materially different process of using said product e.g. the nucleic acids can be used as molecular weight markers in gel electrophoresis. In addition, the product (i.e. nucleic acid) as claimed can be made by another and materially different process e.g. variants of said expressed protein can be made by a protein synthesizer.

**Inventions II and V** are unrelated products which comprise different structural characteristics.

Inventions II and VI are drawn to patentably distinct product and method. The product as claimed can be used in another and materially different process. For example, the proteins as claimed) can be used as molecular weight markers in gel electrophoresis.

Inventions II and VII are drawn to patentably distinct product and method. The product as claimed can be used in another and materially different process. For example, the proteins as claimed) can be used as molecular weight markers in gel electrophoresis.

Inventions II and VIII are drawn to patentably distinct product and method. The product as claimed can be used in another and materially different process. For example, the proteins as claimed can be used as molecular weight markers in gel electrophoresis.

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Inventions III and IV, III and VI, III and VII and III and VIII are unrelated and patentably distinct methods with different goals, different intermediate steps and different end results (see MPEP § 806.04, MPEP § 808.01).

**Inventions III and V** are drawn to unrelated product (i.e. a computer readable medium having stored thereon a nucleic acid sequence or a polypeptide sequence) and process (i.e. a method of producing a purified protein) which are patentably distinct..

**Inventions** IV and V are drawn to unrelated product (i.e. a computer readable medium having stored thereon a nucleic acid sequence or a polypeptide sequence) and process (i.e. a method of mutagenesis) which are patentably distinct.

Inventions IV and VI, IV and VII and IV and VIII are unrelated and patentably distinct methods with different goals, different intermediate steps and different end results (see MPEP § 806.04, MPEP § 808.01).

Inventions V and VI and V and VII and V and VIII are drawn to a product (Group V - i.e. a computer readable medium having stored thereon a nucleic acid sequence or a polypeptide sequence) which is unrelated to and patentably distinct from the processes recited in Groups VI, VII and VIII.

**Inventions VI and VII, VI and VIII, and VIII and VIII** are unrelated and patentably distinct methods with different goals, different intermediate steps and different end results (see MPEP § 806.04, MPEP § 808.01).

- **3.** Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification and the necessity for non-coextensive literature and sequence searches, restriction for examination purposes as indicated is proper.
- **4.** Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a diligently-filed petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(h).

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- **5.** Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).
- **6.** Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ethan Whisenant, Ph.D. whose telephone number is (703) 308-6567. The examiner can normally be reached Monday-Friday from 8:30AM -5:30PM EST or any time via voice mail. If repeated attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, W. Gary Jones, can be reached at (703) 308-1152.

The fax number for this Examiner is (703) 746-8465. Before faxing any papers please inform the examiner to avoid lost papers. Please note that the faxing of papers must conform with the Notice to Comply published in the Official Gazette, 1096 OG 30 (November 15, 1989). Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist whose telephone number is (703) 308-0196.

ETHAN C. WHISENANT PRIMARY EXAMINER